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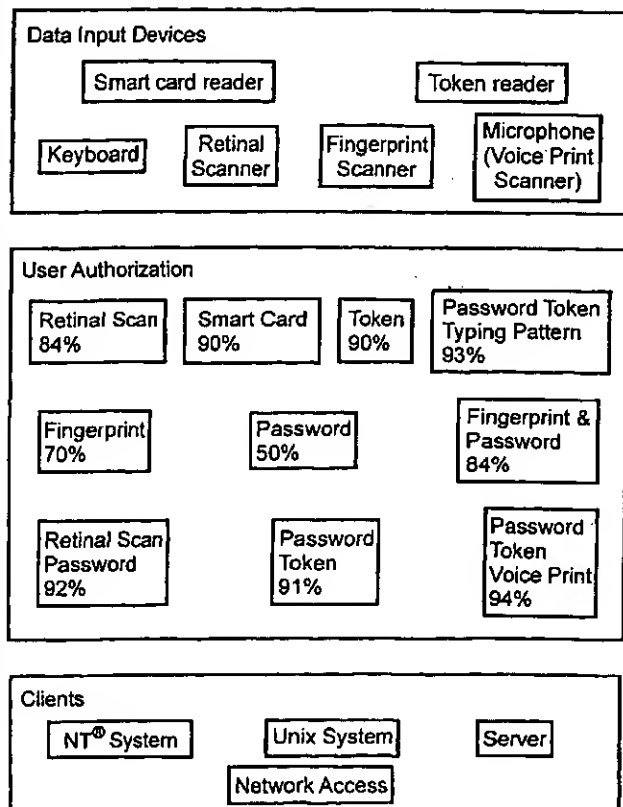
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(54) Title: FLEXIBLE METHOD OF USER AUTHENTICATION



(57) Abstract: A method of authorising a user in communication with a workstation is disclosed. According to the method, a system automatically determines a plurality of available user information entry devices in communication with the workstation. The system then determines predetermined user authorisation methods each requiring data only from available user information entry devices. The user then selects one of the determined authorisation methods for use in user authorisation. Optionally, each authorisation method is associated with a security level relating to user access to resources. Once the authorisation method is selected, the user provides user authorisation information in accordance with a determined user authorisation method and registration proceeds.

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Claims

What is claimed is:

1. A method of authorising a user in communication with a workstation
5 comprising the steps of:
 automatically determining a plurality of available user information entry
 devices in communication with the workstation;
 determining user authorisation methods each requiring data only from
 available user information entry devices from a plurality of user authorisation
10 methods, each user authorisation method associated with a security level, some user
 authorisation methods associated with different security levels for a same user;
 providing user authorisation information in accordance with one of the
 determined user authorisation methods;
 selecting from the determined user authorisation methods a method wherein
15 the provided user authorisation information is provided in accordance with the
 selected method; and,
 registering the user authorisation information provided against stored data to
 perform at least one of identifying and authorising the user within the associated
 level of security.
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2. A method of authorising a user in communication with a workstation
as defined in claim 1, comprising the step of:
 determining security information associated with the user and with the
 selected user authorisation method, the security information different for different
25 user authorisation methods.
3. A method of authorising a user in communication with a workstation
comprising the steps of:
 providing a plurality of supported user authorisation methods and associated
30 security levels for each user authorisation method;
 providing user authorisation information to the workstation;

determining from the plurality of supported user authorisation methods an authorisation method requiring data only from the provided user authorisation information; and,

5 registering the user authorisation information provided against stored data to perform at least one of identifying and authorising the user with the associated level of security.

4. A method of authorising a user in communication with a workstation as defined in claim 3 comprising the step of:

10 selecting from the provided user authorisation methods a method wherein the provided user authorisation information is provided in accordance with the selected method.

5. A method of authorising a user in communication with a workstation as defined in claim 4 comprising the steps of:

15 at intervals prompting an individual using the workstation to provide user authorisation information according to the selected method; and,
registering the user authorisation information provided against stored data to perform one of providing access to the secured data and denying access to the
20 secured data in dependence upon the registration results.

6. A method of authorising a user in communication with a workstation as defined in claim 3 comprising the step of:

25 determining security information associated with the user and the security level, the security information different for different user authorisation methods.

7. A method of authorising a user in communication with a workstation as defined in claim 6 wherein the step of determining security information comprises the step of retrieving a security key from a key storage location in dependence upon
30 the registration.

8. A method of authorising a user in communication with a workstation as defined in claim 7 wherein the security key is an encryption key.

9. A method of authorising a user in communication with a workstation as defined in claim 7 wherein the security key is a password.

5 10. A method of authorising a user in communication with a workstation as defined in claim 3 comprising the steps of:

upon initiating access to secured data prompting an individual using the workstation to provide user authorisation information; and,

10 registering the user authorisation information provided against stored data in accordance with a user authorisation method to perform one of providing access to the secured data and denying access to the secured data in dependence upon the registration results.

11. A method of authorising a user in communication with a workstation comprising the steps of:

providing a plurality of user authorisation methods, some user authorisation methods requiring user authorisation information from more than one data input device;

15 providing user authorisation information;

20 registering the provided user authorisation information against data stored in a database of user authorisation data;

when the data matches the stored data within predetermined limits, determining a security level for the individual in dependence upon the provided user authorisation information and the plurality of user authorisation methods; and,

25 authorising user access within limits based upon determined security level.

12. A method of authorising a user in communication with a workstation as defined in claim 11 wherein user access is limited by limiting access to security keys based on the determined security level.

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13. A method of authorising a user in communication with a workstation as defined in claim 12 wherein the security keys include encryption keys.

14. A method of authorising a user in communication with a workstation as defined in claim 13 wherein the security keys are stored within a portable storage medium.

5 15. A method of authorising a user in communication with a workstation as defined in claim 14 wherein access to some security keys is provided when a user is authorised according to a method of user authorisation but is denied when a user is authorised according to another method of user authorisation.

10 16. A method of authorising a user in communication with a workstation as defined in claim 12 wherein the security keys include passwords.

17. A method of authorising a user in communication with a workstation as defined in claim 11 comprising the steps of:

15 selecting a user authorisation method from the plurality of user authorisation methods during execution; and,
providing user authorisation information in accordance with the selected user authorisation method.

20 18. A method of authorising a user in communication with a workstation as defined in claim 11 comprising the steps of:

automatically determining a presence or absence of user information entry devices in communication with the workstation, the user information entry devices including a keyboard, a card reader, and a biometric input device; and,

25 determining user authorisation methods from the plurality of user authorisation methods that require data only from user information entry devices which are present.

19. A method of authorising a user in communication with a workstation
30 as defined in claim 18 comprising the steps of:

selecting a user authorisation method from the plurality of determined user authorisation methods; and,

providing user authorisation information in accordance with the selected user authorisation method.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F1/00

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F G07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01 82190 A (RENNER GEORGE FREDERICK ;GLOBAL TRANSACTION COMPANY (US)) 1 November 2001 (2001-11-01) page 3, line 4 - line 13	1-4,6, 10,11, 17-19
Y	page 12, line 19 -page 15, line 25 figure 3	5,7,8, 12-15
X	GB 2 342 744 A (TOKYO SHIBAURA ELECTRIC CO) 19 April 2000 (2000-04-19) abstract page 5, line 12 -page 6, line 11 page 8, line 12 -page 9, line 20 page 16, line 18 -page 18, line 14 page 22, line 15 -page 26, line 19 page 33, line 6 - line 25 figures 1,7	3,4,6, 10,11,17

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Patent family members are listed in annex.

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